



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,024	02/14/2002	Daniel George Bridgwater	7346.0103.002 (CIN 0103)	7370
40443	7590	05/14/2004		
BRIAN L. RIBANDO REISING, ETHINGTON, BARNES, KISSELLE, P.C. P. O. BOX 4390 TROY, MI 48099			EXAMINER ROSS, DANA	
			ART UNIT 3722	PAPER NUMBER 10

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/076,024

Applicant(s)

BRIDGWATER, DANIEL GEORGE

Examiner

Dana Ross

Art Unit

3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is a second office action, final rejection on Application No. 10/076,024 in response to the amendment filed on April 5, 2004.

Claim Objections

2. The claim objections are withdrawn due to Applicant's amendment dated April 5, 2004.

Claim Rejections - 35 USC § 112

3. The claim rejections under 35 USC § 112 are withdrawn due to Applicant's amendment dated April 5, 2004.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 25 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,210,085 (Haninger). Haninger teaches a machine tool comprising means to flow fluid across one or more surfaces of the machine to remove swarf, the means comprising a fluid receptacle 22, a means to deliver fluid to the receptacle, a flow line extending from the receptacle to one or more machine surfaces through which fluid may flow from the receptacle in the removal of swarf from the surface, and outflow means to cause fluid to flow from the receptacle intermittently (col. 4, lines 5-13). It is also noted that Haninger teaches it is well known in the art to have a coolant supply system continually being activated and deactivated **as a workpiece is being machined** to remove chips from the tool and workpiece (col. 1, lines 63-67). The thermal

Art Unit: 3722

insulating feature of Haninger is to compensate for the change in temperature due to “activating the coolant supply system and then deactivating it” and the “extremely rapid temperature changes” that occur (see col. 2, lines 12-17 and lines 25-31).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 14, 15, 17- 21, 23, 24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,210,085 (Haninger) in view of U.S. Pat. No. 5,593,596 (Bratten). Haninger teaches all aspects of the above claim 25 and 28 rejections. Hanninger does not teach the pump or time interval between successive outflows from the fluid receptacle. Bratten teaches the pump delivering the various volumes to the receptacle by any of a various conventional types currently on the market (col. 3, lines 30-51). Bratten also teaches the use of a sump 18A the sizing of the sump dependent on the coolant being pumped into the sump. For example, the sump is sized depending on the pump size, “for example, sump 18A might be sized to receive 25 gallons per minute” (see col. 3, lines 30-41). Therefore it would have been obvious to modify the receptacle as taught by Hanninger to include the various conventional pumps as taught by Bratten to have a pump that pumps at a flow rate of between 2 and 10 liters or whatever rate is necessary depending on the size of the sump (see Bratten, col. 3, lines 30-41).

In regard to claim 20, Hanninger in view of Bratten discloses the claimed invention except for the plurality of receptacles. It would have been an obvious matter of design choice to

Art Unit: 3722

have a plurality of receptacles to provide a separate container for back-up purposes ensure a continuous flow of fluid to the machine. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. No. 6,210,085 (Haninger) in view of U.S. Pat. No. 5,593,596 (Bratten) in view of U.S. Pat. No. 6,126,099 (Fachinger et al.). Haninger in view of Bratten teach all aspects of the claimed invention as described in the above claim 21 rejection. Haninger does not teach a sump which separates the fluid and swarf. Fachinger et al. teaches placing a chip separator sump to separate the chips from the swarf (col. 5, lines 54-56). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Haninger to include the chip separating sump as taught by Fachinger et al. for the purpose of separating the swarf from the fluid.

Response to Arguments

9. Applicant's arguments filed April 5, 2004 have been fully considered but they are not persuasive.

Applicant's arguments are directed toward the limitation of "a swarf flushing system" in which swarf is removed from machine surfaces intermittently. In response to Applicant's assertion that Haninger "does not show a swarf removal system for a machine tool in which swarf is removed from machine surfaces by fluid which flows only intermittently during the time the machine is generating swarf", Applicant is referred to the above claim 25 and 28 claim rejections. It is well known in the art to have a supply system continually being activated and

Art Unit: 3722

deactivated as a workpiece is being machined in order to flush chips from the tool and workpiece (see Haninger, col. 1, lines 63-67).

In response to Applicants assertion that the use of a chip separator sump to separate chips from swarf is not in itself new, but what is new is the use of the sump with a "swarf flushing system in which swarf is removed from machine surfaces intermittently", it is noted that the sump as claimed is directed towards separating fluid from swarf, As is taught by Haninger, the intermittent flushing with the use of a sump is well known in the art. As is stated by applicant, sumps to separate the fluid from swarf is also well known. There is nothing limiting in the structure of Haninger to include the use of the well known sump which separates the fluid from the swarf as is evidenced the sump of Fachinger.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Art Unit: 3722

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is (703) 305-7764. The examiner can normally be reached on Mon-Fri 7:00am - 3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmr


A. L. WELLINGTON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700